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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/421,710	10/20/1999	DANIEL S. VENOLIA	M61.12-0144	4522

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EXAMINER	
ARMSTRONG, ANGELA A	

ART UNIT	PAPER NUMBER
2654	17

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/421,710	VENOLIA ET AL.	
	Examiner	Art Unit	
	Angela A. Armstrong	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-3, 17-21, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanBuskirk et al (US Patent No. 6,075,534) in view of Tannenbaum (US Patent No. 6,233,560) and Imade (US Patent No. 6,311,160).
2. Regarding claims 1-3, 17-21, and 29 VanBuskirk et al teaches

A minimal GUI for speech recognition in which the recognized text field and the system status visual user feedback component are combined together and can be displayed as embedded in the window of an application or can be a floating window at col. 1, lines 63-67, col. 5, lines 7-10 and col. 2, lines 60-63

Activating a microphone and displaying an indication that the microphone is active at col. 4, lines 42-51 and Figures 6 and 7

Variations in the volume of the user speech is displayed by a ribbon with fixed edge and movable edge to alter the shape and altering the color in response to variations in volume of the user speech (using speech signal value to determine coordinates of shape of display meter) at col. 2, lines 15-24.

Displaying the variations of the user speech with a moving ribbon or thermometer at col. 4, lines 26-32.

Although VanBuskirk et al teaches a floating window to provide a system status visual user feedback component, they do not specifically teach that the floating window should be placed near an insertion area. Refer to Tannenbaum who teach a method and apparatus for presenting proximal feedback of voice commands in which confirmation information is displayed on the screen at a location functionally related to the analyzed contents and context of the voice input (Abstract). Tannenbaum teaches that displaying the confirmation information at these areas of the screen avoids distractions associated with fixed location confirmation areas (Abstract).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition confirmation display system of VanBuskirk et al to implement displaying the visual feedback component on the screen in area related to the voice input, as taught by Tannenbaum, for the purpose of avoiding distractions associated with fixed location confirmation areas, as also taught by Tannenbaum.

3. VanBuskirk et al do not specifically teach providing information on progress in decoding a speech input. Refer to Imade who teach speech to image reproducing apparatus, which determined by computation the progress of the volume of the data being reproduced and provides a visual indication of that speech processing process (col. 5, line 56 continuing to col. 6, line 34).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the system of VanBuskirk et al to implement displaying visual feedback information

regarding processing of the audio input as taught by Imade, for the purpose of providing the user with information as to whether the audio input was received and processed.

Neither VanBuskirk, Tannenbaum nor Imade specifically teach displaying a volume meter close to a progress meter. However, VanBuskirk et al teaches that the multiple function graphical user interface should supply information is the smallest space possible (col. 3, lines 49-52).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to display the volume meter close to the audio processing progress meter for the purpose of using the smallest space possible when implementing the graphical user interface, as suggested by VanBuskirk et al.

4. Claims 4-16, 20, 22-28, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanBuskirk et al, Tannenbaum and Imade in view of French-St. George et al (US Patent No. 6,018,711).

5. Regarding claims 4-12, 22-28, and 30-33, although VanBuskirk et al teach a shape that changes size and color based on the variations of the speech signal volume, neither VanBuskirk Tannenbaum, or Imade specifically teach a mathematical function or relationship that governs the rate of change of the graphic display. French–St. George et al teaches animated graphical output in which the rate at which the animation diminishes in size is a linear function (abstract; col. 6, lines 60-67; col. 7, lines 1-21;col. 8, lines 9-53), for the purpose of improving of user feedback and control of the speech interface (col.5, lines 32-36).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition graphical user interface of VanBuskirk to implement animated graphical output in which the rate at which the animation diminishes in size is a linear function, as taught by French-St. George et al, for the purpose of improving of user feedback and control of the speech interface, as also taught by French-St. George.

6. Regarding claims 15-16, VanBuskirk et al do not specifically teach providing information on progress in decoding a speech input. Refer to Imade who teach speech to image reproducing apparatus, which determined by computation the progress of the volume of the data being reproduced and provides a visual indication of that speech processing process (col. 5, line 56 continuing to col. 6, line 34).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the system of VanBuskirk et al to implement displaying visual feedback information regarding processing of the audio input as taught by Imade, for the purpose of providing the user with information as to whether the audio input was received and processed.

Response to Arguments

7. Applicant's arguments filed January 23, 2004 have been fully considered but they are not persuasive.

Applicant argues VanBuskirk does not show or suggest that the volume tracking window should be placed near an insertion maker and does not show or suggest a progress meter that shows the amount of progress in decoding an input speech signal. Applicant also argues Imade

does not show a progress meter that shows the progress in decoding an input speech signal and does not show or suggest placing a progress meter near an insertion marker. Applicant also argues the combination of VanBuskirk, Tannenbaum and Imade does not show or suggest the invention of claim 1 because none of the references show or suggest a progress meter that quantitatively indicates the amount of progress in decoding a speech input or the ability to place such a progress meter at an insertion area. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, VanBuskirk was cited as teaching a system in which variations in the volume of the user speech is displayed by a ribbon with fixed edge and movable edge to alter the shape and altering the color in response to variations in volume of the user speech, such that the user's speech signal is used to determine coordinates of shape of the display meter (moving ribbon or thermometer); Tannenbaum was cited as teaching a method and apparatus for presenting proximal feedback of voice commands in which confirmation information is displayed on the screen at a location functionally related to the analyzed contents and context of the voice input; and Imade was cited for teaching a speech to image reproducing apparatus, which determines by computation the progress of the volume of the data being reproduced and provides a visual indication of that speech processing process. Hence, the combination of VanBuskirk, Tannenbaum, and Imade provides support for a moving ribbon or thermometer of speech input as taught by VanBuskirk, that provides a visual indication of a speech processing process (which reads on "quantitatively indicates the amount of progress"), as provided by

Imade, such that the moving ribbon or thermometer is displayed at a location functionally related to the analyzed contents and context of voice input (which reads on "decoding speech input" and "progress meter at an insertion area"), as provided by Tannenbaum.

Applicant argues that it is impossible for Tannenbaums's system to be used to place a progress meter that must be displayed before the recognition is completed. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "progress meter that must be displayed before the recognition is completed") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, the teachings of VanBuskirk and Imade provide support for the system providing a progress meter before recognition is completed.

Applicant argues the combination of VanBuskirk, Imade and Tannenbaum does not show or suggest a display that includes both a progress meter and a shape that is formed by transforming a digital speech value into coordinates. The Examiner disagrees and argues the combination of VanBuskirk, Imade, and Tannenbaum provide support for the progress meter and shape that is formed by transforming a digital speech value into coordinates, as evidenced by VanBuskirk (col. 2, lines 15-24; col. 4, lines 26-32), Tannenbaum (col. 3, lines 11-16), and Imade (col. 5, line 56 to col. 6, line 34).

Applicant argues French-St. George does not suggest an animation should be placed near an insertion point and does not show or suggest a progress meter that indicates the amount of progress in decoding an input speech segment. In response to applicant's arguments against the

references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, VanBuskirk was cited as teaching a system in which variations in the volume of the user speech is displayed by a ribbon with fixed edge and movable edge to alter the shape and altering the color in response to variations in volume of the user speech, such that the user's speech signal is used to determine coordinates of shape of the display meter (moving ribbon or thermometer); Tannenbaum was cited as teaching a method and apparatus for presenting proximal feedback of voice commands in which confirmation information is displayed on the screen at a location functionally related to the analyzed contents and context of the voice input; and Imade was cited for teaching a speech to image reproducing apparatus, which determines by computation the progress of the volume of the data being reproduced and provides a visual indication of that speech processing process. Hence, the combination of VanBuskirk, Tannenbaum, and Imade provides support for a moving ribbon or thermometer of speech input as taught by VanBuskirk, that provides a visual indication of a speech processing process (which reads on "quantitatively indicates the amount of progress"), as provided by Imade, such that the moving ribbon or thermometer is displayed at a location functionally related to the analyzed contents and context of voice input (which reads on "decoding speech input" and "progress meter at an insertion area"), as provided by Tannenbaum.

Applicant argues none of the references in the combination of VanBuskirk, Imade, Tannenbaum and French-St. George show or suggest applying a mathematical function to at least one digital speech value to produce a transform value and using that transform value to identify

coordinates for at least one shape on a display. The Examiner disagrees and argues French–St. George teaches animated graphical output in which the rate at which the animation diminishes in size is a linear function and VanBuskirk teaches variations of speech is displayed by a ribbon with fixed edge and movable edge to alter the shape and altering the color by using speech signal value to determine coordinates of shape of display meter, which provides support applying a variety of mathematical functions to obtain values for a shape on the display, since the moving ribbon or thermometer changes in relationship to the speech being processed (see Figures 1(a), 1(b), 1(c), 2(a), 2(b), 3(a), and 3(b)) and darker hatching or changes to the ribbon necessarily requires a functional relationship to adequately change the ribbon from a full ribbon as indicated at Figure 3(a) to other scenarios as indicated at Figures 2(a) and 1(c).

Applicant argues none of the references in the combination of VanBuskirk, Imade, Tannenbaum and French-St. George show or suggest accessing a maximum transform value, dividing the transform value produced from a digital speech value by the maximum transform value or using the resulting ratio to calculate coordinates for a base rectangle. The Examiner disagrees and argues The Examiner disagrees and argues French–St. George teaches animated graphical output in which the rate at which the animation diminishes in size is a linear function and VanBuskirk teaches variations of speech is displayed by a ribbon with fixed edge and movable edge to alter the shape and altering the color by using speech signal value to determine coordinates of shape of display meter, which provides support applying a variety of mathematical functions to obtain values for a shape on the display, since the moving ribbon ("rectangle") or thermometer changes in relationship to the speech being processed (see Figures 1(a), 1(b), 1(c), 2(a), 2(b), 3(a), and 3(b)) and darker hatching or changes to the ribbon

necessarily requires a functional relationship to adequately change the ribbon ("rectangle") from a full ribbon as indicated at Figure 3(a) to other scenarios as indicated at Figures 2(a) and 1(c).

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258. The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A. Armstrong
Examiner
Art Unit 2654

AAA
April 4, 2004

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER